

TEST

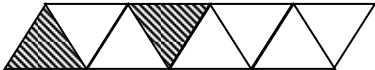
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MATHEMATICS TEST 4

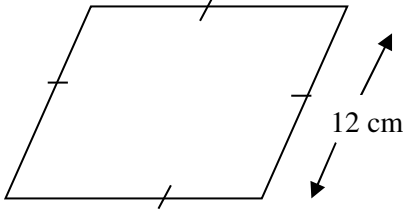
TIME- 75 MINUTES




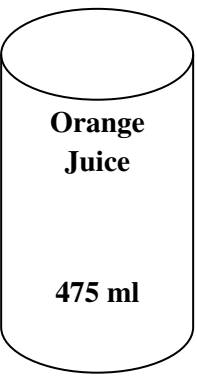
SECTION 1

Each question is worth 1 mark. Answer ALL questions. Show ALL working in the Working Column.

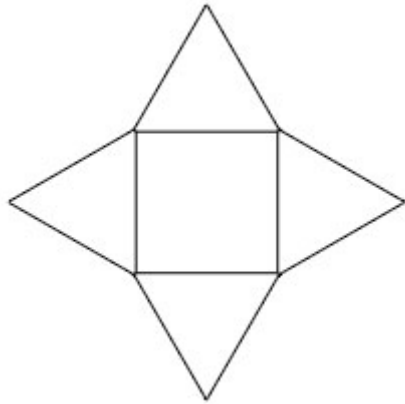
No.	Items	Working Column	Marks
1.	SUBTRACT: $\begin{array}{r} 947 \\ - 504 \\ \hline \end{array}$ Answer: _____	443	
2.	DIVIDE $4 \overline{)416}$ Answer: _____	104	
3.	Write the numeral which represents $(4 \times 10\,000) + (9 \times 1000) + (8 \times 10) + (7 \times 1)$ Answer: _____	49 087	
4.	What FRACTION of the shape is shaded?  Answer: _____	$\frac{2}{8} = \frac{1}{4}$	

5.	Express $9\frac{2}{3}$ as an IMPROPER fraction. Answer: _____	$\frac{29}{3}$								
6.	Tom has 160 mangoes. He sells $\frac{3}{8}$ of them. How many mangoes does Tom sell? Answer: _____	$\frac{3}{8} \times \frac{160}{1} = 60$								
7.	Complete the sequence below. <table border="1" data-bbox="285 999 818 1058"> <tr> <td>1</td> <td>3</td> <td>6</td> <td>10</td> <td>15</td> <td>21</td> <td></td> </tr> </table> Answer: _____	1	3	6	10	15	21		$21 + 7 = 28$	
1	3	6	10	15	21					
8.	Write the correct number in the circle to give the result shown. $14 \times 3 + \bigcirc = 54$ Answer: _____	$14 \times 3 + \bigcirc = 54$ $42 + \bigcirc = 54$ $\bigcirc = 12$								
9.	Anushka has a total of \$9.00 in her cash pan. If she only saves 25¢ coins, how many 25¢ coins does she have? Answer: _____ coins	$\begin{aligned} \$1 &= 4 \text{ 25c} \\ \$9 &= 4 \times 9 \\ &= 36 \text{ 25c} \end{aligned}$								

<p>10.</p>	<p>The RHOMBUS below has a side of length 12cm.</p>  <p>What is the perimeter of this shape?</p> <p>Answer: _____ cm</p>	<p style="text-align: center;">Perimeter = 12×4 = 48cm</p>	
<p>11.</p>	<p>The area of a square is 169 cm^2. Calculate the length of ONE of its sides.</p> <p>Answer: _____ cm</p>	<p style="text-align: center;">Area of square = 169 cm^2 Side = $\sqrt{169}$ = 13cm</p>	
<p>12.</p>	<p>Nafeeza's journey from Sangre Grande to Port-of-Spain took 165 minutes.</p> <p>How many hours did her journey take?</p> <p>Answer: _____ hours</p>	<p style="text-align: center;">$165 \div 60$ = $2 \text{ hrs } \frac{45}{60} \text{ mins}$ = $2 \frac{3}{4} \text{ hrs}$</p>	
<p>13.</p>	<p>Mark has \$9.00. Pens are sold at \$2.75 each. What is the GREATEST number of pens that Mark can buy?</p> <p>Answer: _____ pens</p>	<p style="text-align: center;">$\\$ 9.00 \div \\$ 2.75$ = $\frac{900}{275}$³⁶ = $\frac{36}{11}$ = 3 pens</p>	

<p>14.</p>	<p>Harry purchased 5 pears from Stall A and John purchased 5 pears from Stall B.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <div style="border: 1px solid black; padding: 5px; width: 100px;"> <p>Stall A</p> <p>5 for \$3.00</p> </div> </div> <div style="text-align: center;">  <div style="border: 1px solid black; padding: 5px; width: 100px;"> <p>Stall B</p> <p>5 for \$4.00</p> </div> </div> </div> <p>Who bought the pears at a cheaper rate?</p> <p>Answer: _____</p>	<p style="color: red;">Stall A = \$ 3 ÷ 5 1 pear = \$0.60</p> <p style="color: red;">Stall B = \$ 4 ÷ 5 1 pear = \$ 0.80</p> <p style="color: red;">Stall A is cheaper ∴ Harry bought pears at a cheaper rate</p>	
<p>15.</p>	<p>Two containers are shown below. Which container holds more?</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Soft Drink</p> <p>$\frac{1}{2}$ Litre</p> </div> <div style="text-align: center;">  <p>Orange Juice</p> <p>475 ml</p> </div> </div> <p>Answer: _____</p>	<p style="color: red;">$\frac{1}{2}$ l = 500 ml</p> <p style="color: red;">Soft Drink = 500 ml Orange Juice – 475 ml</p> <p style="color: red;">∴ Soft Drink holds more</p>	

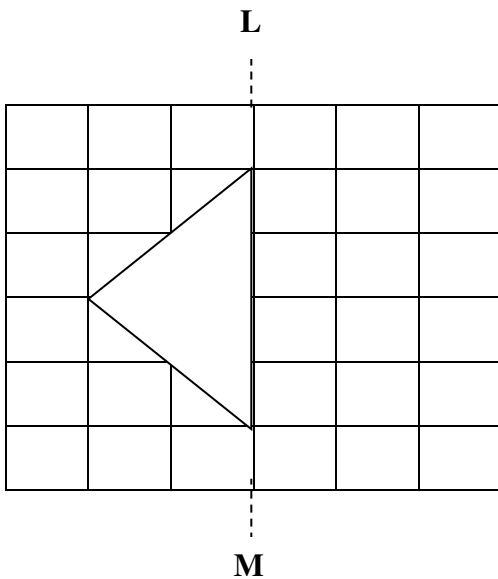
16. What is the name of the solid that will be formed when the net below is folded?



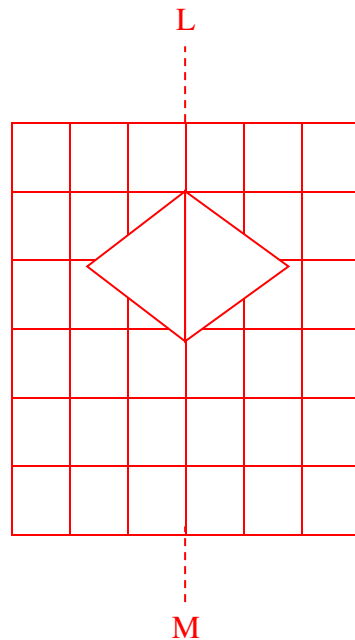
Answer: _____

Square based pyramid

17. Complete the shape below so that LM is a line of symmetry.



Answer: _____



SECTION 2

Each question is worth either 2 or 3 marks. Answer ALL questions. Show ALL working in the Working Column.

No.	Items	Working Column	Marks
21.	<p>How many pieces of rope of length 0.4 m can be cut from a piece 14.4 m long?</p> <p>Answer: _____ pieces (2)</p>	$14.4 \div 0.4$ $= 144 \div 4$ $= \mathbf{36 \text{ pieces}}$	
22.	<p>$\frac{2}{5}$ of a number is 60.</p> <p>What is $\frac{2}{3}$ of the SAME number?</p> <p>Answer: _____ (2)</p>	$\frac{2}{5} = 60$ $1 = \frac{60}{1} \times \frac{5}{2}$ $= 150$ $\frac{2}{3} \times \frac{150}{1}$ $= \mathbf{100}$	
23.	<p>Arrange the following fractions from the LARGEST to the SMALLEST.</p> <p>$\frac{5}{8}$, $\frac{2}{3}$, $\frac{3}{5}$</p> <p>Answer: _____ (2)</p>	$\frac{5}{8} = 0.625 \quad \frac{2}{3} = 0.667 \quad \frac{3}{5} = 0.600$ $\therefore \text{Largest to Smallest} = \frac{2}{3} \quad \frac{5}{8} \quad \frac{3}{5}$	
24.	<p>What are the next two numbers in the sequence</p> <p>25, 36, 49, 64, _____, _____?</p> <p>Answer: _____ and _____ (2)</p>	<p style="color: red; font-weight: bold;">Squared Numbers</p> <p style="color: red; font-weight: bold; font-size: 1.2em;">81, 100</p>	

<p>25.</p>	<p>Pedro shared 120 marbles between his two friends, Deo and Tim, such that Tim got 14 less than Deo.</p> <p>a) How many marbles did Tim get?</p> <p>Answer: _____(2)</p> <p>b) How many marbles did Deo get?</p> <p>Answer: _____(1)</p>	$120 - 14$ $= 106$ $106 \div 2$ $= 53$ <p>(a) Tim = 53 marbles</p> <p>(b) Deo = 67 marbles (53 + 14)</p>	
<p>26.</p>	<p>Mrs. Susan buys some candies for children in a class. She fills 25 bags with 12 sweets each. She has 8 candies remaining.</p> <p>a) How many candies did Mrs. Susan purchase?</p> <p>Answer: _____ candies (2)</p> <p>b) How many bags could she fill if she puts 11 candies in EACH bag?</p> <p>Answer: _____ bags (1)</p>	<p>(a) Purchased = (25 x 12) + 8</p> $= 300 + 8$ $= \mathbf{308 \text{ candies}}$ <p>(b) $308 \div 11$</p> $= \mathbf{28 \text{ bags}}$	
<p>27.</p>	<p>A merchant bought 10 fans on Monday, 6 on Tuesday and 4 on Friday.</p> <p>a) Calculate the percent of fans he bought on Friday.</p> <p>Answer: _____ (2)</p> <p>b) If he sold all the fans he bought on Monday, what percent of the fans is he left with?</p> <p>Answer: _____ (1)</p>	<p>(a) Total = 20fans</p> $\text{Friday} = \frac{4}{20} \times \frac{100}{1}$ $= \mathbf{20\%}$ <p>(b) Left with = 10 fans</p> $\text{Percent left} = \frac{10}{20} \times \frac{100}{1}$ $= \mathbf{50\%}$	

28. A cricket team earns 3 points for a win, 1 point for a draw and zero points for a loss.

The table below shows the points earned by the team.

Results	Points
Win	18
Draw	5
Loss	0

The team played 15 matches. How many matches did the team lose?

Answer: _____ matches (3)

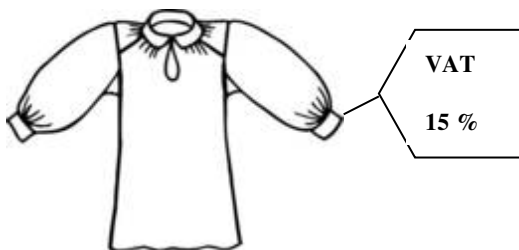
$$\begin{aligned} \text{Win} &= 18 \div 3 \\ &= 6 \text{ matches} \end{aligned}$$

$$\begin{aligned} \text{Draw} &= 5 \div 1 \\ &= 5 \text{ matches} \end{aligned}$$

$$\begin{aligned} \text{Win + Draw} &= 6+5 \\ &= 11 \text{ matches} \end{aligned}$$

$$\begin{aligned} \therefore \text{Lost} &= 15 - 11 \\ &= 4 \text{ matches} \end{aligned}$$

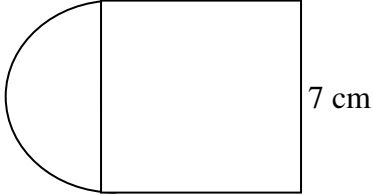
29. Sara buys the blouse below which is priced at \$180.00.

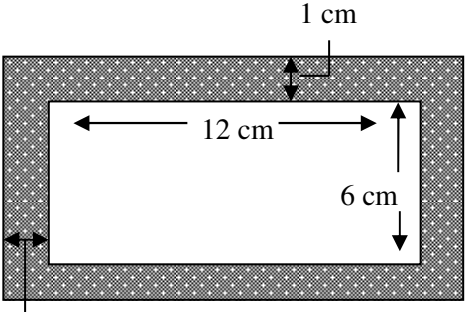


How much money does she pay for the blouse if VAT is charged at 15%?

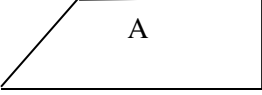
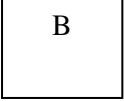
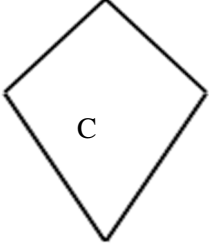
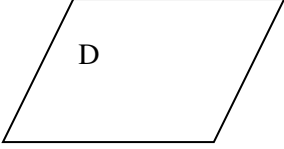
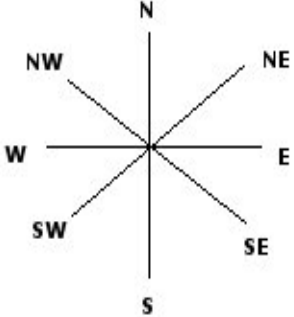
Answer: \$ _____ (2)

$$\begin{aligned} \text{VAT} &= 15\% \\ \text{Paid} &= \frac{115}{100} \times \frac{180}{1} \\ &= \$ 207 \end{aligned}$$

<p>30.</p>	<p>Alice left home for school at 7:15 a.m. She waited 10 minutes to get on the bus. If she arrived at 8:10 a.m., how long did the bus take to get to school?</p> <p>Answer: _____ (2)</p>	$\begin{array}{r} 7:15 \\ \quad :10 \\ \hline 7:25 \end{array}$ $\begin{array}{r} 8:10 \\ \quad :10 \\ \hline 7:25 \\ \text{:45 minutes} \end{array}$	
<p>31.</p>	<p>The diagram shows a square joined to a semi-circle at one end.</p>  <p>Calculate the perimeter of the combined shape.</p> <p>Answer: _____ (2)</p>	<p>Circumference of semi-circle</p> $= \frac{1}{2} [D \times \pi]$ $= \frac{1}{2} \left[\frac{7}{1} \times \frac{22}{7} \right]$ $= \frac{1}{2} \times \frac{22}{1}$ $= 11 \text{ cm}$ <p>Perimeter of combined shape</p> $= (7 \times 3) + 11$ $= 21 + 11$ $= \mathbf{32 \text{ cm}}$	

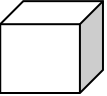
<p>32.</p>	<p>a) A picture is 12 cm long and 6 cm wide. What is the area of the picture?</p> <p>Answer: _____ cm² (1)</p> <p>b) There is a frame 1 cm wide around the picture as shown below.</p>  <p>Calculate the area of the frame.</p> <p>Answer: _____ cm² (2)</p>	<p>(a) Area of picture = 12×6 = 72 cm²</p> <p>(b) Area of larger rect. = 14×8 = 112 cm²</p> <p>\therefore Area of picture frame = $112 - 72$ = 40 cm²</p>	
<p>33.</p>	<p>Eddy's allowance was \$80.00. Two fifths of his allowance is equal to $\frac{1}{2}$ of Leo's allowance.</p> <p>a) How much is Leo's allowance?</p> <p>Answer: _____ (2)</p> <p>b) How much is $\frac{5}{8}$ of Eddy's allowance?</p> <p>Answer: _____ (1)</p>	<p>(a) $\frac{2}{5} \times \frac{80}{1} = \\$ 32$</p> <p>$\frac{1}{2} = \\$ 32$</p> <p>$1 = \\$ 32 \times 2$ Leo's allowance = \$ 64</p> <p>(b) $\frac{5}{8} \times \frac{80}{1}$ = \$ 50</p>	

<p>34.</p>	<p>Larry borrowed \$5000.00 from the bank for a period of 3 years at a rate of 6% per annum.</p> <p>a) Calculate the interest that Larry must repay.</p> <p>Answer: \$_____ (2)</p> <p>b) How much money must Larry repay the bank at the end of 3 years?</p> <p>Answer: \$_____ (1)</p>	<p>(a) $S.I = \frac{P \times R \times T}{100}$</p> <p>$= \frac{5000 \times 6 \times 3}{100}$</p> <p>= \$ 900</p> <p>(b) Amount = Principal + S.I</p> <p>$= \\$ 5000 + \\$ 900$</p> <p>= \$ 5 900</p>	
<p>35.</p>	<p>Paula's mother gave her \$3.00 for every \$10.00 she saved. Paula saved \$40.00.</p> <p>a) How much money does her mother have to give her?</p> <p>Answer: \$_____ (2)</p> <p>b) How much money would she have ALTOGETHER?</p> <p>Answer: \$_____ (1)</p>	<p>(a) $(40 \div 10) \times 3$</p> <p>$= 4 \times 3$</p> <p>∴ Paula's mother gave her \$12</p> <p>(b) Altogether</p> <p>$= 40 + 12$</p> <p>= \$ 52</p>	

<p>36.</p>	<p>Name the two quadrilaterals which have TWO pairs of parallel lines.</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>A</p> <p>Trapezium</p> </div> <div style="text-align: center;">  <p>B</p> <p>Square</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>C</p> <p>Kite</p> </div> <div style="text-align: center;">  <p>D</p> <p>Parallelogram</p> </div> </div> <p>Answer: _____ (2)</p>	<p>Square and Parallelogram</p>	
<p>37.</p>	<p>Sally is facing NE. She turns in a clockwise direction to face SW.</p> <div style="text-align: center;">  </div> <p>a) What fraction of a whole does Sally turn?</p> <p>Answer: _____ (1)</p> <p>b) How many MORE degrees must she turn in order to face West?</p> <p>Answer: _____ (1)</p>	<p>(a) $\frac{1}{2}$ turn</p> <p>(b) 1 space = $360 \div 8$ = 45°</p> <p>Sally must turn 45° to face West</p>	

38.

Complete the table below.

Diagram of Solid	Name of Solid	Number of Faces	Number of Corners
	(a)	(b)	(c)

(1) (1) (1)

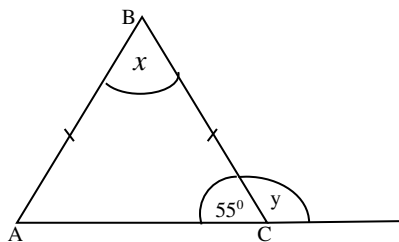
a) Cube

b) 6 square faces

c) 8 corners

39.

Study the diagram below and answer the questions that follow



a) Calculate the value of x and y .

Answer: $x =$ _____

$y =$ _____

(2)

b) Circle the term which BEST describes the angle x .

acute obtuse reflex

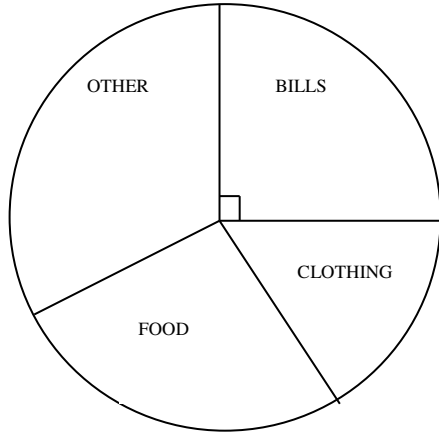
Answer: _____ (1)

$$(a) \ x^\circ = 180^\circ - 110^\circ (55^\circ + 55^\circ) = 70^\circ$$

$$y^\circ = 180^\circ - 55^\circ = 125^\circ$$

(b) Acute

40. The pie chart below shows how Mr. John spends his salary for the month.



Calculate his monthly salary if he spends \$1200.00 on bills.

Answer: \$ _____ (2)

$$\frac{1}{4} = \$ 1\ 200$$

$$1 = 1\ 200 \times 4$$

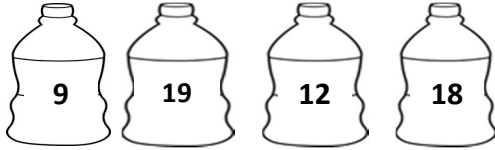
$$= \$ 4800$$

SECTION 3

Each question is worth 5 marks. Answer ALL questions. Show ALL working in the Working Column.

No.	Items	Working Column	Marks															
41.	<p>Allan's marks for the three subjects in an examination are shown on his report card below.</p> <p style="text-align: center;">Allan's Report</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Subject</th> <th style="width: 30%;">Maximum Marks</th> <th style="width: 30%;">Marks Obtained</th> </tr> </thead> <tbody> <tr> <td>Composition</td> <td style="text-align: center;">100</td> <td style="text-align: center;">90</td> </tr> <tr> <td>Mathematics</td> <td style="text-align: center;">100</td> <td style="text-align: center;">85</td> </tr> <tr> <td>Language Arts</td> <td style="text-align: center;">100</td> <td style="text-align: center;">65</td> </tr> <tr> <td>Total</td> <td style="text-align: center;">300</td> <td></td> </tr> </tbody> </table> <p>a) Calculate the TOTAL marks Allan obtained for the examination.</p> <p>Answer: _____ (1)</p> <p>b) Express the total marks that Allan obtained as a percentage of the maximum marks for the test.</p> <p>Answer: _____% (2)</p> <p>c) How many MORE marks did Allan need in order to get 90% on the test?</p> <p>Answer: _____ (2)</p>	Subject	Maximum Marks	Marks Obtained	Composition	100	90	Mathematics	100	85	Language Arts	100	65	Total	300		<p>(a) Total Marks = $90 + 85 + 65$ = 240 marks</p> <p>(b) Allan's Percentage = $\frac{240}{300} \times \frac{100}{1}$ = 80%</p> <p>(c) $90\% = 90 \times 3$ = 270 marks</p> <p>Difference = $270 - 240$ = 30 more marks needed</p>	
Subject	Maximum Marks	Marks Obtained																
Composition	100	90																
Mathematics	100	85																
Language Arts	100	65																
Total	300																	

42. At a school bazaar, four bottles with numbers on them are lined up as shown below.



For every turn, a person is given three balls to knock down three bottles. The numbers are added and a prize is given for EXACT scores as shown on the table below.

Prize	Score
Phone	49
Wallet	46
Truck	40
Tea-set	39

a) Kira knocks down three bottles marked 18, 9 and 12.

Which prize does she win?

Answer: _____ (1)

b) Kira wants to win the wallet. Which THREE bottles should she knock down?

Answer: _____ (2)

c) If Kira knocks down the bottle marked 9 as one of the three bottles, which prize will she NOT be able to win?

Answer: _____ (2)

$$(a) \text{ Kira won} = 18 + 9 + 12 \\ = 39 - \text{Tea-set}$$

$$(b) \text{ Wallet} = 19 + 18 + 9$$

$$(c) 9 + 19 + 12 = \text{Phone} \\ 9 + 12 + 18 = \text{Tea-set} \\ 9 + 19 + 18 = \text{Wallet}$$

\therefore She would not be able to win the TRUCK

43. Complete Darren's shopping bill below.

(a)

Item	Quantity	Cost	Amount Paid
Crayons	3 boxes	\$5.00	<input type="text"/> (1)
Stickers	<input type="text"/> (2)	25¢ each	<input type="text"/> (1)
Total			\$ 20.00
VAT		15%	<input type="text"/> (1)

(b)

(c)

Answer: _____

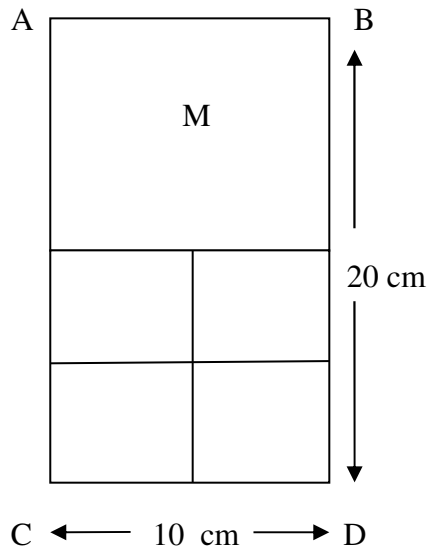
(a) $3 \times 5 = \$15$

(b) $\$20 - \$15 = \$5$

$\$5 \div .25 = 20 \text{ stickers}$

(c) $\frac{15}{100} \times \frac{20}{1} = \3

44. The rectangle ABCD shown below is made up of square M and four other identical squares whose sum of areas is equal to the area of square M.



- a) What is the area of the square M ?

Answer: _____ cm²

- b) Calculate the area of **ONE** of the four smaller squares.

Answer: _____ cm²

- c) Calculate the perimeter of ABCD.

Answer: _____ cm

(a) Area of square M = 10×10

= **100 cm²**

(b) Area of smaller sq.= 5×5

= **25 cm²**

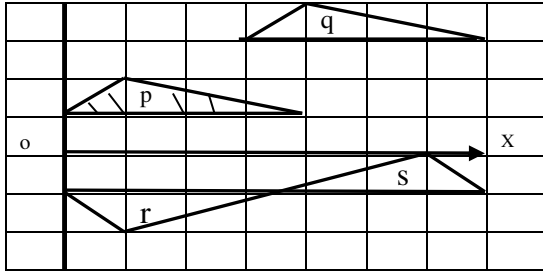
(c) Perimeter of ABCD

= $[20 \times 2] + [10 \times 2]$

= $40 + 20$

= **60 cm**

45. The shaded triangle at p is moved to various positions, q, r and s.



Describe CLEARLY the movements in EACH of the following:

- a) p to q

Answer: _____

(2)

- b) r to s

Answer: _____

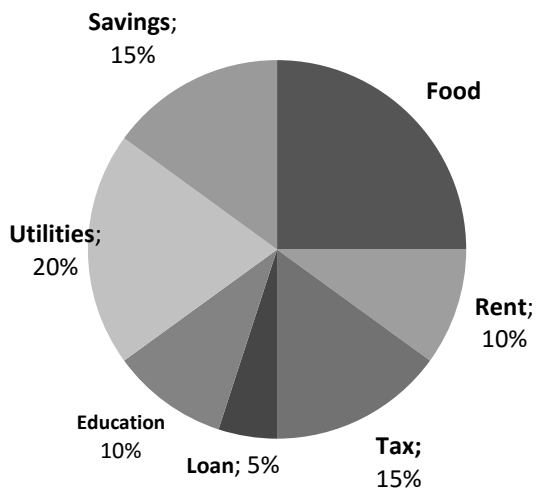
(3)

- (a) SLIDE 3 units right, 2 units up

- (b) $\frac{1}{2}$ turn clockwise or 180° turn in a clockwise direction

46.

Column1



The pie chart represents how Mr. Gary spent his monthly salary of \$12,000.00.

- a) Calculate the sum of money Mr. Gary spends on food.

Answer: _____ (2)

- b) Calculate the money spent on loans for a period of ONE YEAR.

Answer: _____ (2)

- c) What fraction of Mr. Gary salary is spent on utilities?

Answer: _____ (1)

$$\begin{aligned} \text{(a) Food} &= \frac{1}{4} \times \frac{12000}{1} \\ &= \$ 3000 \end{aligned}$$

$$\begin{aligned} \text{(b) Loans} &= 5\% \times 12000 \\ &= \$ 600/\text{mth} \\ 12\text{mths} &= 600 \times 12 \\ &= \$ 7\ 200 \end{aligned}$$

$$\begin{aligned} \text{(c) Utilities} &= \frac{20}{100} \\ &= \frac{1}{5} \end{aligned}$$

END OF TEST 4